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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,683	03/17/2004	Yoshiyuki Tsuji	250502US0X	1876
22850 7590 04/25/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER O HERN, BRENT T	
			ART UNIT 1772	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/25/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/25/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/801,683

Applicant(s)

TSUJI ET AL.

Examiner

Brent T. O'Hern

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 8-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 12-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims

1. Claims 1-26 are pending with claims 8-11 withdrawn and claims 21-26 new.

WITHDRAWN REJECTIONS

2. The 35 U.S.C. 112, second paragraph rejections of claims 1-2, 4-5 and 12-14 of record in the Office Action mailed 16 August 2006, page 2, paragraph 4 have been withdrawn since the above recitation of claims is a typo since the claims at issue are claims 3, 6 and 7 and the claims that depend from them.

REPEATED REJECTIONS

3. The 35 U.S.C. 112, second paragraph rejections of claims 3, 6-7 and 15-20 of record in the Office Action mailed 8 December 2006, page 2, paragraph 4 are repeated for the reasons of record.
4. The 35 U.S.C. 102(b) rejections of claims 1-7 and 12-20 as being anticipated by Segawa et al. (US 2002/0078886) of record in the Office Action mailed 8 December 2006, page 3, paragraph 5 are repeated for the reasons of record.

NEW REJECTIONS

5. Newly added dependent Claims 24-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The rejection is based on their dependency of indefinite claims 3, 6 and 7 as discussed above in para. 2.

Claim Rejections - 35 USC § 103

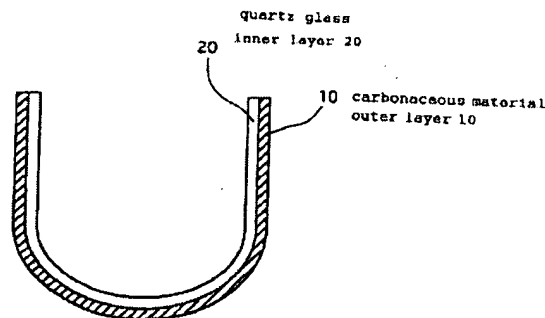
6. Claims 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Segawa et al. (US 2002/0078886) in view of Tsuji et al. (US 6,524,668).

Art Unit: 1772

Regarding claims 21-23, Segawa ('886) teaches the silica glass crucible discussed above, however, fails to expressly disclose a carbon susceptor adhered to the outer surface of the silica glass crucible.

However, Tsuji ('668) teaches a carbon susceptor adhered to the outer surface of the silica glass crucible (*FIG-1, #10*) for the purpose of providing superior thermal resistance and material strength at high temperature (*col. 3, ll. 38-42*).

FIG. 1



Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to provide a susceptor adhered to the outer surface of the silica glass crucible as taught by Tsuji ('668) in Segawa ('886) in order to provide superior thermal resistance and material strength at high temperature.

Regarding claims 24-26 Segawa ('886) teaches the silica glass crucible discussed above, however, fails to expressly disclose wherein the carbon member is a graphite susceptor.

However, Tsuji ('668) teaches wherein the carbon member is a graphite susceptor (*col. 3, ll. 35-37*) for the purpose of providing superior thermal resistance and material strength at high temperature (*col. 3, ll. 38-42*).

Art Unit: 1772

Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to provide a graphite susceptor as taught by Tsuji ('668) in Segawa ('886) in order to provide superior thermal resistance and material strength at high temperature.

ANSWERS TO APPLICANT'S ARGUMENTS

7. In response to Applicant's arguments (*p. 8, paras. 1-3 of Applicant's Paper filed 8 March 2007*) that the 35 USC 112 rejection of Applicant's claims 3, 6-7 and 15-20 should be withdrawn because "carbon member" is not indefinite, it is noted that Applicant's explanation is appreciated and helpful, however, nowhere within the original disclosure, including the claims does Applicant define carbon member to be made from carbon. Furthermore, nowhere within Applicant's disclosure does Applicant disclose the carbon member to consist of 100% carbon. In order for one of ordinary skill in the art to determine what carbon member means they would have to impermissibly look beyond the four corners of Applicant's disclosure. Thus, Applicant's claims 3, 6-7, 15-20 and new claims 21-26 stand rejected under 35 USC 112.

8. In response to Applicant's arguments (*p. 8, paras. 4-5 of Applicant's Paper filed 8 March 2007*) that grooves with a length and/or width of "0 μm " are limiting since it is impossible to have a groove having a length and width of zero, it is noted that the Examiner concurs with Applicant that such a groove is impossible. Applicant highlights the Examiner's point that Applicant is attempting to claim something that is impossible, thus non-limiting.

9. In response to Applicant's arguments (*p. 9, para. 1 to p. 11, para. 1 of Applicant's Paper filed 8 March 2007*) that the use limitation in claim 1, line 1 should be given

Art Unit: 1772

patentable weight, it is noted that the Examiner acknowledges and appreciates the detailed analysis comparing Applicant's invention to Segawa ('886), however, it is well settled that patentability of a product is determined by the claimed structural limitations of the product, not by how it may be used. The proposition that Applicant's invention may have possible uses not contemplated by Segawa ('886) does not make Applicant's claims patentable over Segawa's ('886) silica glass crucible which anticipates all of the same structural limitations. If Applicant intends to protect the use of their crucible for growing crystals then Applicant is advised to consider filing an application drafted to said use.

10. In response to Applicant's argument (*p. 11, para. 2 of Applicant's Paper filed 8 March 2007*) that Segawa ('886) does not teach newly added claims 21-23, it is noted that Tsuji ('668) teaches said limitations as discussed above in the 35 USC 103 rejection.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 1772

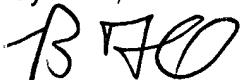
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent T. O'Hern whose telephone number is (571) 272-0496. The examiner can normally be reached on M-F, 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-2172. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Brent T O'Hern
Examiner
Art Unit 1772
April 2, 2007

 4/18/07
NASSER AHMAD
PRIMARY EXAMINER